

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently Amended): A liquid crystal display having a liquid crystal cell of bend alignment mode and a pair of polarizing plates provided on both sides of the cell, wherein at least one of the polarizing plates comprises a polarizing membrane and an optical compensatory film positioned nearer to the liquid crystal cell than the polarizing membrane, said optical compensatory film having at least two optically anisotropic layers comprising first and second optically anisotropic layers, said first optically anisotropic layer being made from discotic compounds oriented in hybrid alignment, said second optically anisotropic layer consisting of a cellulose ester film, and said polarizing membrane and said first and second optically anisotropic layers being so placed that the first optically anisotropic layer giving in plane the maximum refractive index in a direction of essentially 45° to a transmission axis in plane of the polarizing membrane, and that the second optically anisotropic layer gives in plane the maximum refractive index in a direction essentially parallel or perpendicular to a transmission axis in plane of the polarizing membrane, and wherein the liquid crystal cell of bend alignment mode and the first and second optically anisotropic layers have optical ~~characters~~ characteristics satisfying the following formula (1) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(1) \quad 0.05 < \Delta n \times d / (R_{e1} \times R_{th2}) < 0.20$$

in which Δn is an inherent birefringent index of rod-like liquid crystal molecules in the liquid crystal cell; d is a thickness of a liquid crystal layer in the liquid crystal cell in terms of nm;

Re1 is a retardation value in plane of the first optically anisotropic layer; and Rth2 is a retardation value along a thickness direction of the second optically anisotropic layer,

wherein the optical compensatory film gives retardation values Re(0°), Re(40°) and Re(-40°) at 546 nm in the ranges of 30±10 nm, 50±10 nm and 115±10 nm, respectively, and wherein Re(0°), Re(40°) and Re(-40°) stand for retardation values of the optical compensatory film when the retardation is measured, in a plane including the normal of the film and the direction giving in the film plane the minimum refractive index of the optical compensatory film, in the directions inclined at 0°, 40° and reversely 40° from the normal to the plane, respectively, and

wherein the first optically anisotropic layer further contains a fluorine-containing polymer in the range of 0.005 to 8 wt.% based on the amount of components of a coating solution other than a solvent.

Claim 2 (Original): The liquid crystal display as defined in claim 1, wherein the $\Delta n \times d$ satisfies the following formula (2) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(2) \quad 100 \text{ nm} < \Delta n \times d < 1,500 \text{ nm.}$$

Claim 3 (Original): The liquid crystal display as defined in claim 1, wherein the Re1 satisfies the following formula (3) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(3) \quad 10 \text{ nm} < \text{Re1} < 50 \text{ nm.}$$

Claim 4 (Original): The liquid crystal display as defined in claim 1, wherein the Rth2 satisfies the following formula (4) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(4) \quad 70 \text{ nm} < \text{Rth2} < 400 \text{ nm}.$$

Claim 5 (Canceled)

Claim 6 (Currently Amended): The liquid crystal display as defined in claim [[5]] 1, wherein the direction giving in the film plane the minimum refractive index of the optical compensatory film is essentially at 45° to a longitudinal direction when the optical compensatory film is produced.

Claim 7 (Original): The liquid crystal display as defined in claim 1, wherein the optical compensatory film and the polarizing membrane are laminated by attaching the film in the form of a roll to the membrane in the form of a roll.

Claim 8 (Currently Amended): A liquid crystal display of reflection type having a reflection board, a liquid crystal cell of hybrid alignment mode and a polarizing plate in order, wherein the polarizing plate comprises a polarizing membrane and an optical compensatory film positioned nearer to the liquid crystal cell than the polarizing membrane, said optical compensatory sheet having at least two optically anisotropic layers comprising first and second optically anisotropic layers, said first optically anisotropic layer being made from discotic compounds oriented in hybrid alignment, said second optically anisotropic layer consisting of a cellulose ester film, and said polarizing membrane and said first and

second optically anisotropic layers being so placed that the first optically anisotropic layer gives in plane the maximum refractive index in a direction of essentially 45° to a transmission axis in plane of the polarizing membrane, and that the second optically anisotropic layer gives in plane the maximum refractive index in a direction essentially parallel or perpendicular to a transmission axis in plane of the polarizing membrane, and wherein the liquid crystal cell of hybrid alignment mode and the first and second optically anisotropic layers have optical characters characteristics satisfying the following formula (5) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(5) \quad 0.025 < \Delta n \times d / (Re1 \times Rth2) < 0.10$$

in which Δn is an inherent birefringent index of rod-like liquid crystal molecules in the liquid crystal cell; d is a thickness of a liquid crystal layer in the liquid crystal cell in terms of nm; $Re1$ is a retardation value in plane of the first optically anisotropic layer; and $Rth2$ is a retardation value along a thickness direction of the second optically anisotropic layer,

wherein the optical compensatory film gives retardation values $Re(0^\circ)$, $Re(40^\circ)$ and $Re(-40^\circ)$ at 546 nm in the ranges of 30 ± 10 nm, 50 ± 10 nm and 115 ± 10 nm, respectively,
wherein $Re(0^\circ)$, $Re(40^\circ)$ and $Re(-40^\circ)$ stand for retardation values of the optical compensatory film when the retardation is measured, in a plane including the normal of the film and the direction giving in the film plane the minimum refractive index of the optical compensatory film, in the directions inclined at 0° , 40° and reversely 40° from the normal to the plane, respectively, and

wherein the first optically anisotropic layer further contains a fluorine-containing polymer in the range of 0.005 to 8 wt.% based on the amount of components of a coating solution other than a solvent.

Claim 9 (Original): The liquid crystal display as defined in claim 8, wherein the $\Delta n \times d$ satisfies the following formula (6) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(6) \quad 50 \text{ nm} < \Delta n \times d < 750 \text{ nm.}$$

Claim 10 (Original): The liquid crystal display as defined in claim 8, wherein the $Re1$ satisfies the following formula (7) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(7) \quad 10 \text{ nm} < Re1 < 50 \text{ nm.}$$

Claim 11 (Original): The liquid crystal display as defined in claim 8, wherein the $Rth2$ satisfies the following formula (8) when measured at any wavelength of 450 nm, 550 nm and 630 nm:

$$(8) \quad 70 \text{ nm} < Rth2 < 400 \text{ nm.}$$

Claim 12 (Canceled)

Claim 13 (Currently Amended): The liquid crystal display as defined in claim [[12]] 8, wherein the direction giving in the film plane the minimum refractive index of the optical compensatory film is essentially at 45° to a longitudinal direction when the optical compensatory film is produced.

Claim 14 (Original): The liquid crystal display as defined in claim 8, wherein the optical compensatory film and the polarizing membrane are laminated by attaching the film in the form of a roll to the membrane in the form of a roll.

Claim 15 (Withdrawn): A method for testing an optical compensatory film having a transparent support and an optically anisotropic layer made from liquid crystal compounds, which comprises the steps of: placing the optical compensatory film between a pair of Glan-Thompson prisms, positioning the film and the prisms so that light-transmittance may be the least, and measuring the light-transmittance to confirm whether the value defined by the following formula is smaller than a predetermined value or not:

$$100 \times (T-C) / (P-C)$$

in which T is a light-transmittance measured where the optical compensatory film and the pair of Glan-Thompson prisms are positioned so that the light-transmittance may be the least; P is a light-transmittance measured where only the Glan-Thompson prisms are placed in parallel Nicols arrangement; and C is a light-transmittance measured where only the Glan-Thompson prisms are placed in crossed Nicols arrangement.

Claim 16 (Withdrawn): The method as defined in claim 15, wherein the predetermined value is 0.005.

Claim 17 (Withdrawn): An apparatus for testing an optical compensatory film having a transparent support and an optically anisotropic layer formed from liquid crystal compounds, which comprises a light source, a pair of Glan-Thompson prisms, a holder with which the optical compensatory film is kept and placed between the Glan-Thompson prisms,

a mechanism rotating the Glan-Thompson prisms independently around the light path, and a light-receiver by which light having been emitted from the light source and passed through the optical compensatory film and the Glan-Thompson prisms is detected and evaluated.

Claim 18 (Withdrawn): The apparatus as defined in claim 17, wherein the apparatus further comprises another mechanism rotating the optical compensatory film around the light path.

Claim 19 (New): The liquid crystal display as defined in claim 1, wherein the fluorine-containing polymer has a weight average molecular weight of 3,000 to 100,000.

Claim 20 (New): The liquid crystal display as defined in claim 1, wherein the fluorine-containing polymer is a copolymer comprising fluorine-containing repeating units and units derived from polyoxyalkylene (meth)acrylate.

Claim 21 (New): The liquid crystal display as defined in claim 8, wherein the fluorine-containing polymer has a weight average molecular weight of 3,000 to 100,000.

Claim 22 (New): The liquid crystal display as defined in claim 8, wherein the fluorine-containing polymer is a copolymer comprising fluorine-containing repeating units and units derived from polyoxyalkylene (meth)acrylate.